## ON SOME NEW PHALANGERS OF THE GENUS PSEUDOCHIRUS BY OLDFIELD THOMAS

By the kindness of the authorities of the Museo Civico, Genoa I have been permitted to examine some mammals obtained by Dr. Loria in the district of the Vanapa river, British New Guinea. Examples are present of the rare species Dendrolagus dorianus, Dorcopsis macleayi and Phascologale wallacei, intergrading specimens of both dark and light forms of Phalanger orientalis, and finally three skins of a new Pseudochirus allied to Ps. albertisi. In working out the last named, two other Pseudochiri in the British Museum, received since the publication of the Catalogue of Marsupials, prove to need description.

The British Museum has been most generously presented with a duplicate series of these interesting mammals.

By Dr. Loria's desire, the new species discovered by him is named in memory of his deceased sister.

## 1. Pseudochirus corinnae, sp. n.

General external appearance above strikingly like that of Ps. albertisi. Indeed the resemblance is so great that at first sight the two animals appear to be identical, many and essential as their detailed differences are. General colour of back rather lighter and more silvery, especially where it borders on each side the dark dorsal line. Ears longer, closely hairy to their edges outside, but entirely without the long black hairs with which they are tufted in Ps. albertisi; lower part of their outer edge with a yellowish spot. Undersurface of body dirty rufous or fulvous grey, little defined; without mesial white markings. Hands, feet and tail not or scarcely darkening terminally; indeed the digits are lighter than the metapodials, though there are

some black hairs at the bases of the claws. Terminal half of tail naked and very coarsely shagreened along its under surface. Centre of chest with a skin gland.

Skull with the zygomata much less strongly and abruptly thrown out in the orbital region than in *Ps. albertisi*. Nasals longer and less strikingly broadened behind. Interorbital region also less broadened in front, its edges raised into ridges similar in character to those of the allied species, but viewed in profile they are less high opposite the centre of the orbits. Bullae conspicuously smaller than in *Ps. albertisi*, scarcely inflated at all.

Teeth. Anterior upper incisors very long;  $i^2$  rather shorter horizontally than in *albertisi*, but still longer than  $i^3$ . Canine longer than any of the four teeth nearest to it, twice the height and four times the bulk of the small anterior premolar next succeeding it; — in *albertisi* the canine and first premolar are of about the same size. Molars rather larger than in the allied species.

Below, the anterior incisors are quite different to those of *albertisi*, being long and straight, without the peculiar concavity of the upper edge characteristic of that species. A single intermediate unicuspid tooth present on each side. Other teeth as usual.

Dimensions of an adult male, in skin:

Head and body (c) 310; tail (c) 320; skull, basal length 63.5; greatest breadth 41; nasals  $23 \times 11.5$ ; interorbital constriction 7; palate breadth outside  $m^2$  20. Vertical height of  $i^1$  6.3; horizontal length of  $i^2$  2.7; height of canine 3.4; combined lengths of  $ms_{1-3}$  13. Length of  $i_1$  14, of  $ms_{1-4}$  17.5.

Hab. Mountains of Vanapa, British New Guinea.

Co-types, two males, precisely similar to each other, in the Genoa and British Museums. Collected and presented by Dr. L. Loria.

In spite of its superficial resemblance to *Ps. albertisi*, this species may be readily recognized by the absence of the marginal bristles to the ears, by its uniform dull fulvous belly, by its narrower nasals, smaller bullae, the length and straightness

of both upper and lower anterior incisors, and by the marked difference in the size of the upper canine and anterior premolar.

## 2. Pseudochirus albertisi coronatus, subsp. n.

Similar in essential characters to the typical form, but the fur of the body enormously lengthened (hairs of back 30 to 35 mm. long), the coloration deeper, richer and more coppery, the brown of the hands, feet and tail darkened to shining black, and the dorsal line extending on to the crown of the head, where it trifurcates and forms a sort of cross. On the undersurface, instead of a white mesial patch, sharply defined, the lighter colour is little defined, and strongly suffused with fulvous brown.

Cranially there is only available a young skull of coronatus for comparison with old ones of typicus, but the posterior part of the nasals and the interorbital region just behind them are so very much narrower than in typicus that it seems unlikely they would ever have attained the remarkable breadth characteristic of that form. This difference is so great that if it is not reduced with age the two animals would have to be considered as different species. The teeth seem to be essentially similar in form, and also, allowing for their unworn and uncrushed state, in size.

Dimensions of the type, a young specimen in skin:

Head and body (c) 250; tail (c) 220 mm. Skull, basal length 48.5; greatest breadth 32.2; nasals  $47 \times 8$ ; horizontal length of posterior upper premolar 4.5; of molars  $^{1-3}$  combined 13.5.

 $\it Hab.$  Arfak Mountains, N. W. New Guinea, at 2000 metres altitude.

Type. Brit. Mus. 94. 2. 14. 4. Collected by Mr. Burke.

The British Museum possesses a specimen of the typical Ps. albertisi from Moeri also in the Arfak mountains at about 1000 m. altitude. At these two altitudes Mr. Barke also collected specimens respectively referable to Phalanger orientatis typicus (1000 m.) and Ph. o. vestitus, M.Edw. (2000) whose differences in pelage are very similar to these found in the two Pseudochiri.

## 3. Pseudochirus cupreus, sp. n.

Size decidedly larger than in Ps. albertisi. General colour uniform dark coppery, very similar to that of Ps. albertisi coronatus. Dorsal streak, although distinct, not strongly marked, not reaching forwards on to the crown, and soon ending posteriorly. Ears with the marginal part of their inner, as well as the whole of their outer surfaces well clothed with woolly hairs, among which there are a few longer black bristles, but these are both fewer and shorter than in Ps. albertisi. Under surface with irregular patches of white on the chest and in the inguinal region, the belly dull buffy grey. Limbs darkening terminally, the hands and feet black. Tail at its base very thickly hairy and coloured like the body, but terminally, on the part which is naked below, it is very thinly haired above as well, becoming gradually practically naked at the extreme tip. The hairs on this terminal part are black. Naked part below tip very coarsely shagreened.

Skull much larger and heavier than in the species above referred to. Nasals less markedly narrowed in front and expanded behind than in *Ps. albertisi*. Interorbital space broad in front, rapidly narrowing to a well defined waist; supraorbital ridges almost obsolete in front of the waist, but behind, on the braincase, they coalesce into a high median sagittal crest, a coalescence which has not taken place in the oldest skulls of *Ps. albertisi* or *corinnae* before me. Bullae well swollen, both below and behind.

Teeth, apart from their greater size, agreeing fairly with those of *Ps. albertisi*, although the upper canine is rather larger than the premolar behind it, and the lower incisors are rather larger and less concave above. Molars very large and massive.

Dimensions of the type, an adult male, in skin:

Head and body (c) 425; tail (e) 330. Skull, basal length (c) 70; greatest breadth 47; nasals  $23.5 \times 11.8$ ; interorbital constriction 7.2; palate breadth outside  $m^2$  22.3, inside  $m^2$  13.6. Horizontal length of  $i^2$  3.5, of  $p^4$  5.5, of  $ms^{1-3}$  16.

Hab. Mount Owen Stanley, British New Guinea.

Type. Brit. Mus. No. 96. 1. 25. 4. Purchased of Mess. rs Mc. Ilwraith and Co.

This fine species, of which the British Museum possesses two examples, may be readily distinguished from its allies by its large size, dark colour, naked tail tip, different supraorbital ridges, and heavy teeth.